

CARBONCALPCF.COM

Product Carbon Footprint for

yewlptgymq

Total PCF: **8.809 kgCO₂e/unit**

8.809

TOTAL FOOTPRINT (KGCO2E/UNIT)

Scope 3

PRIMARY EMISSION SCOPE

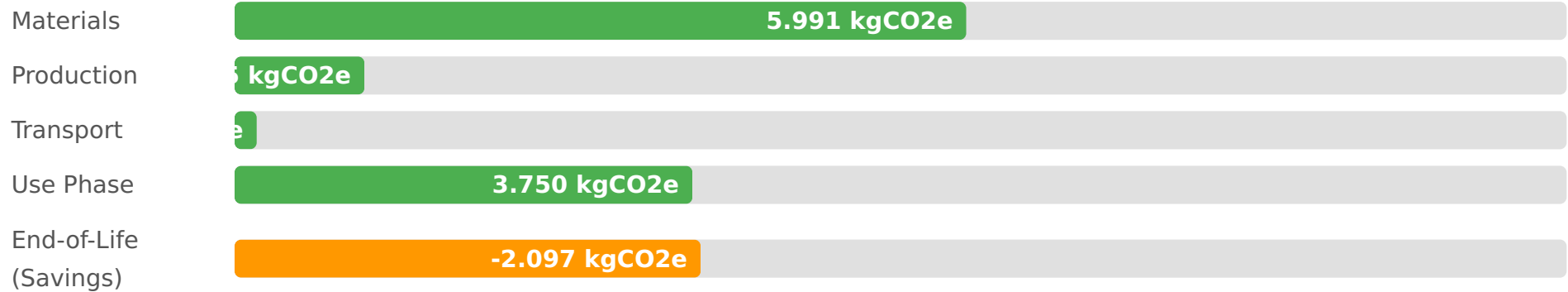
PCB

TOP MATERIAL HOTSPOT

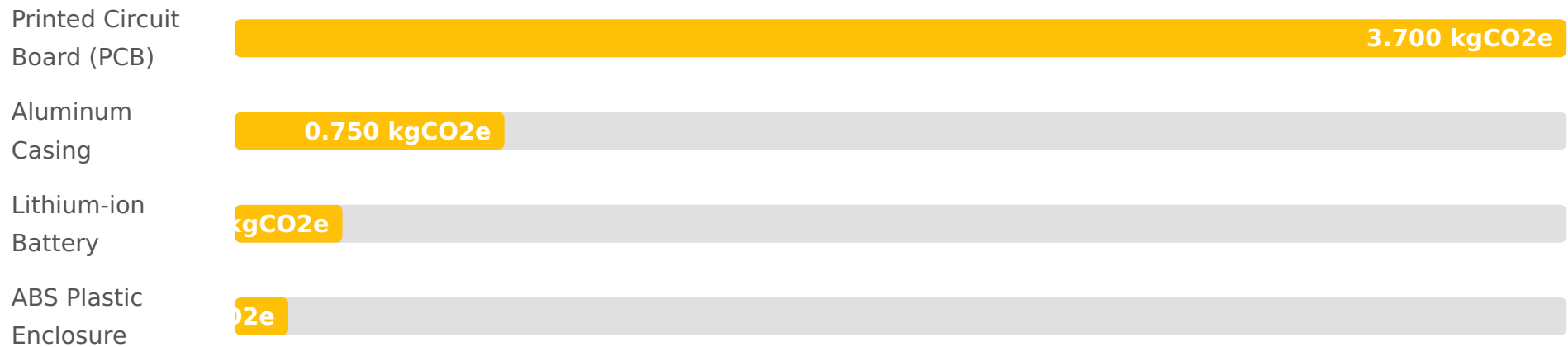
70%

RECYCLABILITY PERCENTAGE

Lifecycle Stage Breakdown



Top Material Carbon Hotspots



Highlights & Emission Hotspots

- **Purchased Goods and Services (Scope 3, Category 1)** is the largest contributor, driven by energy-intensive materials like PCB, Aluminum, and Lithium-ion batteries.
- The **Use of Sold Products (Scope 3, Category 11)** accounts for significant emissions over the product's 3-year lifespan.
- **Production Energy (Scope 2)** in China contributes notably, influenced by the regional grid's carbon intensity.

Recommendations for Reduction

1. **Material Optimization:** Explore lower-carbon alternatives (e.g., recycled aluminum, bio-based plastics) and engage suppliers for primary data and renewable energy adoption.
2. **Manufacturing Efficiency:** Increase renewable energy usage beyond 30% at the China facility and implement energy-efficient production measures.
3. **Use Phase Decarbonization:** Optimize product design for energy efficiency and educate consumers on sustainable usage.
4. **Circular Economy:** Enhance recyclability beyond 70% and strengthen take-back programs for effective recycling rates.